

ORIGINAL

EX PARTE OR LATE FILED
Wiley, Rein & Fielding

1776 K Street, N.W.
Washington, D.C. 20006
(202) 719-7000

Carl R. Frank
Of Counsel
(202) 719-7269
cfrank@wrf.com

Fax: (202) 719-7049
www.wrf.com

September 5, 2000

Magalie Roman Salas, Secretary
Federal Communications Commission
445 12th Street, SW
12th Street Lobby, TW-A325
Washington, DC 20054

RECEIVED
SEP 5 2000
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re: *Ex Parte* Presentation in ET Docket No. 98-42

Dear Ms. Salas:

On Friday, September 1, 2000, Mark Gaudino, Carl Frank, and Michael Lewis representing Sirius Satellite Radio, Inc. ("Sirius") and Lon Levin, Steve Berman, and Phil Barsky representing XM Radio Inc. ("XM Radio") met with Julius Knapp, John Reed, Karen Rackley, and Dale Hatfield of the FCC's Office of Engineering and Technology ("OET"). The purpose of the meeting was to express Sirius' and XM Radio's concerns about the potential proliferation of harmful interference from unlicensed devices to satellite DARS systems operating in the 2320-2345 MHz band. The substance of this meeting is summarized below.

Sirius and XM Radio, as satellite DARS licensees in the 2320-2345 MHz band, have long been concerned about any potential Second Report and Order in the 98-42 Docket that would authorize RF lighting as Part 18 Industrial, Scientific, and Medical ("ISM") equipment. Although neither Sirius nor XM Radio opposes the introduction of RF lighting devices, both parties are concerned that out-of-band emissions from such lighting devices into the satellite DARS band could greatly impair the satellite DARS service since RF lighting operates in the 2450 MHz band, just 100 MHz away from Sirius and XM Radio. Sirius and XM Radio pointed out at the meeting that the FCC's Rules and the Communications Act of 1934, as amended, make clear that ISM devices can only operate if they do not interfere with licensed radio services. As a result, ISM device manufacturers are obligated to design adequate out of band filtering and shielding and cure any interference to licensed services.

At the meeting, Sirius and XM Radio noted that because DARS is a wideband service and because satellite services operate with lower signal margins than terrestrial-based systems, DARS receivers will be extremely sensitive. Therefore, such services are more susceptible than terrestrial broadcast services to interference from low power sources, such as ISM equipment.

No. of Copies rec'd 0
List A B C D E

Such interference can cause great commercial harm to a consumer-oriented, mass media service such as DARS, which is designed to provide high-quality digital audio service to subscribers.

Sirius and XM Radio further noted that satellite DARS receivers and 2.5 GHz RF lighting devices will likely operate in the same environments. Because a likely application of RF lighting will be street lamps, a satellite DARS-equipped vehicle driving along the road or stopped in a parking lot using RF lighting devices could be only a few meters away from a potential interference source. DARS receivers installed in semi-trailers and other types of large trucks would be even closer to the potential interference source.

At the meeting, Sirius and XM Radio pointed out that the Commission previously recognized such considerations when it adopted out-of-band emission requirements to protect licensed operations in the adjacent WCS band. There, the FCC restricted out-of-band emissions to ensure no more than 1.5 dB of potential interference. Thus, the protections afforded to satellite DARS from WCS – a licensed service – far exceed those being considered for RF lighting devices. Nothing in the record would justify a departure in the RF lighting docket from the Commission's clear precedent of protecting licensed operations.

Sirius reminded the Commission staff that its RF Lighting Interference Analysis, which was filed as an *ex parte* submission in this docket on May 25, 2000, demonstrated that, under the non-consumer power limits being considered by the Commission, interference to satellite DARS receivers will occur if the Commission adopts the inadequate protections it is considering. Sirius acknowledged that it was forced to make many assumptions in the development of its analysis, but pointed out that this was necessitated by the reluctance of manufacturers of RF lighting devices to cooperate in actual field testing.

On the issue of testing, Sirius and XM Radio at the meeting stated that the Commission should not issue any order on out-of-band emissions limits for microwave RF lighting devices until comprehensive testing of the effects of these devices on DARS reception has been conducted. Before the Commission acts in this proceeding, the agency must ensure that its planned limits are sufficient to prevent interference to DARS radios. Toward this end, Sirius and XM Radio have already volunteered to conduct field trials with RF lighting proponents. The FCC could "jump start" this process were it to convene a joint meeting with the DARS licensees and the proponents of microwave RF lighting to address the relevant technical issues and encourage a comprehensive testing program.

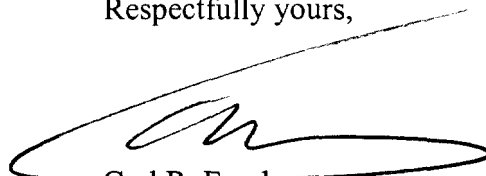
While XM Radio suggested in its June 29, 2000 letter to the Commission that the FCC could minimize interference by limiting deployment of RF lighting devices to indoor environments, XM Radio at the meeting made clear that it no longer views such a limitation as an appropriate solution to these interference concerns. Rather, like Sirius, XM Radio now

believes that the FCC must adopt a stringent out-of-band emission limit in order to protect the satellite DARS operations of Sirius and XM Radio.

In sum, although Sirius and XM Radio do not oppose the introduction of microwave RF lighting devices, they want to ensure that RF lighting is introduced in a manner that does not result in harmful interference to their licensed DARS operations. Sirius and XM Radio believe that the Commission's Rules make clear that it may not authorize RF lighting on an unlicensed ISM basis with the knowledge that such devices will interfere with satellite DARS and possibly other licensed services.

All parties in ET Docket No. 98-42 have received copies of this letter. Should you have any questions regarding the above-discussed meeting with FCC staff on RF lighting issues, please contact the undersigned.

Respectfully yours,

A handwritten signature in dark ink, appearing to be 'C. Frank', is written over a horizontal line.

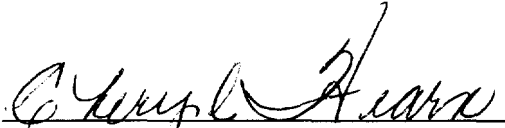
Carl R. Frank

Counsel to Sirius Satellite Radio, Inc.

cc: Donald Abelson
Rosalee Chiara
Ari Fitzgerald
Anna Gomez
Linda Haller
Dale Hatfield
Anna Gomez
Julius Knapp
Rockie Patterson
Karen Rackley
John Reed
Ronald Repasi
Tom Tycz
Attached Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that on this 5th day of September, 2000, I caused copies of the foregoing
Ex Parte Filing of Sirius Satellite Radio Inc. to be mailed via first-class postage prepaid mail
to the following:


Cheryl Hearn

Lonnie McMillan
ADTRAN, Inc.
901 Explorer Blvd.
Huntsville, AL 35806

Donald I. Sloan
Aironet Wireless Communications, Inc.
367 Ghent Road, Ste. 300
P.O. Box 5292
Fairlawn, OH 44334

Nadja S. Sodos, Esq.
Gurman, Blask & Fredman
1400 16th Street, N.W., Ste. 500
Washington, DC 20036

Lon C. Levin, Senior Vice President
XM Satellite Radio
1250 23rd Street, NW, Suite 57
Washington, DC 20037

Bruce D. Jacobs, Esq.
Stephen J. Berman, Esq.
Fisher Wayland Cooper Leader & Zaragoza
L.L.P.
2001 Pennsylvania Avenue, Suite 400
Washington, DC 20006

The American Radio Relay League, Inc.
225 Main Street
Newington, CT 06111

Christopher D. Imlay, Esq.
Booth, Freret, Imlay & Tepper, P.C.
5101 Wisconsin Avenue, N.W., Ste. 307
Washington, DC 20016

Mary J. Dent, Esq.
Goldberg, Godles, Wiener & Wright
1229 19th Street, N.W.
Washington, DC 20036

James T. Carlo, Chair
IEEE 802 LAN/MAN Standards
Texas Instruments
9208 Heatherdale Drive
Dallas, TX 75234

Robert C. LaGasse
Executive Director
International Microwave Power Institute
10210 Leatherleaf Ct.
Manassas, VA 20111

Henry M. Rivera, Esq.
Larry S. Solomon, Esq.
Shook, Hardy & Bacon LLP
1850 K Street, N.W., Ste. 900
Washington, DC 20036

Henry L. Baumann
Larry S. Solomon
Barry D. Umansky
National Association of Broadcasters
1771 N Street, N.W.
Washington, DC 20036

Terry G. Mahn, Esq.
Fish & Richardson P.C.
601 13th Street, N.W.
Washington, DC 20005

Henrietta Wright, Esq.
W. Kenneth Ferree, Esq.
Goldberg, Godles, Wiener & Wright
1229 19th Street, N.W.
Washington, DC 20036

Frank R. Jazzo, Esq.
Mitchell Lazarus, Esq.
Fletcher, Heald & Hildreth, P.L.C.
1300 North 17th Street, 11th Floor
Arlington, VA 22209

James M. (Mack) Sullivan
The Wireless LAN Alliance
2723 Delaware Avenue
Redwood City, CA 94061